UNITED STATES PATENT AND TRADEMARK OFFICE

11-A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,314	06/20/2003	Eric Scott Micko	1187-1.CIP	6164

7590 03/06/2006

John L. Rogitz, Esq.
ROGITZ & ASSOCIATES
Suite 3120
750 "B" Street
San Diego, CA 92101

EXAMINER	
LEE, SHUN K	

ART UNIT	PAPER NUMBER
2884	

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

H-19

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/600,314
Filing Date: June 20, 2003
Appellant(s): MICKO, ERIC SCOTT

John L. Rogitz
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 4 October 2005 appealing from the Office action mailed 6 September 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

U.S. Patent Application No. 10/388,862.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

3,829,693	SCHWARZ	8-1974
5,461,231	SUGIMOTO et al.	10-1995

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Sole Issue: *Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimoto et al. (US 5,461,231) in view of Schwarz (US 3,829,693).*

In regard to claims **1**, **3**, **8**, and **9**, Sugimoto *et al.* disclose (Figs. 1, 2, 3a, 3b, 5, 6, 7a, 7b, and 11) a passive infrared (IR) motion sensor, comprising:

(a) at least a first passive IR detector (3, 3a, 3b) having two and only two elements defining a first spacing therebetween, the first passive IR detector (3, 3a, 3b) monitoring a first subvolume of space and outputting a first signal having a first frequency (Figs. 3a and 7a) when a moving object (H) passes in the first subvolume of space;

(b) at least a second passive IR detector (4, 4a, 4b, 15, 15a, 15b, 15c, 15d) having two and only two elements defining a second spacing therebetween, the second spacing being equal to the first spacing and all four elements having the same size as each other (*i.e.*, substantially the same structure; column 4, lines 1-4), the second passive IR detector (4, 4a, 4b, 15, 15a, 15b, 15c, 15d) monitoring a second subvolume of space and outputting a second signal having a second frequency (Figs. 3b and 7b) when the moving object (H) passes in the second subvolume of space, the second frequency being different than the first (Figs. 3a, 3b, 7a, and 7b);

(c) a processing system (7, 8, 9, 10, 11, and 12) receiving the first and second signals and at least partially based on the first and second signals, outputting a

signal indicating the presence of the moving object (H) only if both the first and second frequencies (Figs. 7a and 7b) are substantially simultaneously received (column 5, lines 17-20), and otherwise not outputting the signal indicating the presence of the moving object (H).

The sensor of Sugimoto *et al.* lacks an optics system at least partially optically superposing the first and second subvolumes, the optics system defining a first focal length associated with the first detector and a second focal length associated with the second detector, the first and second focal lengths not being equal to each other. Schwarz teaches (column 1, line 56 to column 2, line 15; Fig. 1) an optics system defining a first focal length associated with the front of the detector and a second focal length associated with the back of the detector, the first and second focal lengths not being equal to each other, in order to detect both a narrow and a wide field of view. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide an optics system defining a first focal length associated with the first detector and a second focal length associated with the second detector in the sensor of Sugimoto *et al.*, in order to detect a narrow field of view with the first detector and a wide field of view with the second detector.

In regard to claims **4**, **6**, and **7**, the method steps are implicit for the modified apparatus of Sugimoto *et al.* since the structure is the same as the appellant's apparatus of claims 1, 3, 8, and 9.

In regard to claim **2** (which is dependent on claim 1) and claim **5** (which is dependent on claim 4), the sensor and method of Sugimoto *et al.* lacks an explicit

description that the first and second detectors are housed separately from each other. However, detector housings are well known in the art. For example, Schwarz teach (Fig. 2) that a sensor (14) and associated optics (12,13) are mounted in a housing (11). In addition, Sugimoto *et al.* further disclose (column 4, lines 61-65) alternative embodiments wherein the sensors are mounted as a single detector or multiple detectors. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide a single housing or in respective separate housings in the sensor and method of Sugimoto *et al.*, in order to mount the sensors as a single integrated detector module or multiple detector modules which can be individually positioned.

(10) Response to Argument

Appellant argues (first two paragraphs on pg. 5 of appeal brief filed 4 October 2005) that the combination of the cited prior art will not result in the instant claims since Schwarz teaches only a single detector with optics of different focal lengths and Schwarz also teaches more than one detector wherein each detector would be duplicates of a single detector with two optics. In response to appellant's argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Moreover, it appears that appellant admits that Schwarz discloses more than one

detector wherein each detector (*e.g.*, detector A and detector B) would be duplicates of a single detector with two different optics (*e.g.*, optics with focal length f1 and optics with focal length f2). Thus Schwarz teaches detector A having optics with focal length f1 and detector B having optics with focal length f2. That Schwarz also teaches that detector A further comprises optics with focal length f2 and detector B further comprises optics with focal length f1 is immaterial to the fact that Schwarz teaches two detectors with each detector having optics of different focal lengths. Further, Schwarz teaches (column 1, line 56 to column 2, line 15; Fig. 1) to provide first and second focal lengths not being equal to each other, in order to detect both a narrow and a wide field of view. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide an optics system defining a first focal length associated with the first detector and a second focal length associated with the second detector in the sensor of Sugimoto *et al.*, in order to detect a narrow field of view with the first detector and a wide field of view with the second detector.

Appellant argues (first two paragraphs on pg. 6 of appeal brief filed 4 October 2005) that the instant claims are patentable since both Sugimoto *et al.* and Schwarz do not mention frequency differences allowing the discrimination between a moving object and a non-moving object. In response to appellant's argument that the references fail to show certain features of appellant's invention, it is noted that the features upon which appellant relies (*i.e.*, if the two detectors output the same frequency, a non-moving object is indicated) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the

specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Moreover even considering appellant's arguments, Sugimoto *et al.* clearly disclose that detector signals comprise of waveforms having different frequencies (see *e.g.*, Figs. 3a and 3b) and that an analysis of these waveforms having different frequencies allows the detection of body moving through the field of view. Therefore the combined teachings of the references would have suggested to those of ordinary skill in the art that an analysis of waveforms having different frequencies allows the detection of a body moving through the field of view.

Appellant argues (last two paragraphs on pg. 6 of appeal brief filed 4 October 2005) that Sugimoto *et al.* teach separate detector substrates but nowhere teach or suggest the use of separate housings. Examiner respectfully disagrees. The lack of detail in a description does not automatically lead to a conclusion of unobviousness since what is chosen for inclusion within a disclosure depends on a variety of factors. Moreover, Sugimoto *et al.* state (column 3, lines 58-67) that "The exemplary system includes infrared detectors 3 and 4 arranged in parallel, an optical system 2, and detection regions e1, e2, e3, and e4 of which the regions e1 and e2 are spaced from each other and are vertically arranged covering a human height. The detector 3 is provided with a pair of pyroelectric infrared sensors 3a and 3b optically correspond to the detection regions e1 and e2. The detector 4 is provided with a pair of pyroelectric infrared sensors 4a and which optically correspond to the detection regions e3 and e4 spaced from each other and horizontally arranged". Thus Sugimoto *et al.* teach that each detector module comprises one or more sensors. It is important to

recognize that within the disclosure of Sugimoto *et al.*, a sensor is not a synonym for a detector.

Further, Sugimoto *et al.* state (column 4, lines 61-65) that "This example is different from the first example in that the sensors 3a, 3b, 4a, and 4b are mounted on a single detector 13. The circuit is the same as that of FIG. 2. The waveforms of signals are also the same as those shown in FIGS. 3 and 4. This example can save the space in the system". Thus, Sugimoto *et al.* teach an alternative embodiment wherein the sensors are mounted as a single detector module. Clearly this single detector module embodiment is different from a multiple detector modules embodiment. Further, Schwarz was cited as teaching (Fig. 2) that a sensor (14) is mounted in a housing (11). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide a housing for mounting one or more sensors as a detector module.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

SL
23 February 2006

Conferees:
Shun Lee, Art Unit 2884
David Porta, SPE, Art Unit 2884
Drew Dunn, SPE, Art Unit 2872

ROGITZ & ASSOCIATES
SUITE 3120
750 "B" STREET
SAN DIEGO, CA 92101

DAVID PORTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800